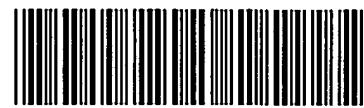


0590
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OIPE

#3

RAW SEQUENCE LISTING DATE: 02/11/2002
 PATENT APPLICATION: US/09/753,008 TIME: 09:36:38

Input Set : N:\Crf3\RULE60\09753008.txt
 Output Set: N:\CRF3\02112002\I753008.raw

SEQUENCE LISTING

C--> 3 (1) GENERAL INFORMATION:
 C--> 5 (i) APPLICANT: Stefan Somlo and Toshio Mochizuki
 7 (ii) TITLE OF INVENTION: POLYCYSTIC KIDNEY DISEASE PKD2 GENE
 8 AND USES THEREOF
 10 (iii) NUMBER OF SEQUENCES: 12
 12 (iv) CORRESPONDENCE ADDRESS:
 13 (A) ADDRESSEE: AMSTER, ROTHSTEIN & EBENSTEIN
 14 (B) STREET: 90 PARK AVENUE
 15 (C) CITY: NEW YORK
 16 (D) STATE: NEW YORK
 17 (E) COUNTRY: U.S.A.
 18 (F) ZIP: 10016
 20 (v) COMPUTER READABLE FORM:
 21 (A) MEDIUM TYPE: 3.5 INCH 1.44 Mb STORAGE
 22 DISKETTE
 23 (B) COMPUTER: IBM PC COMPATIBLE
 24 (C) OPERATING SYSTEM: MS-DOS
 25 (D) SOFTWARE: ASCII
 27 (vi) CURRENT APPLICATION DATA:
 C--> 28 (A) APPLICATION NUMBER: US/09/753,008
 C--> 29 (B) FILING DATE: 02-Jan-2001
 35 (vii) PRIOR APPLICATION DATA:
 32 (A) APPLICATION NUMBER: 09/385,752
 33 (B) FILING DATE: 1999-08-30
 36 (A) APPLICATION NUMBER: 08/651,999
 37 (B) FILING DATE: MAY 23, 1996
 39 (viii) ATTORNEY/AGENT INFORMATION:
 40 (A) NAME: ELIZABETH A. BOGOSIAN
 41 (B) REGISTRATION NUMBER: 39,911
 42 (C) REFERENCE/DOCKET NUMBER: 96700/395
 44 (ix) TELECOMMUNICATION INFORMATION:
 45 (A) TELEPHONE: (212) 697-5995
 46 (B) TELEFAX: (212) 286-0854 or 286-0082
 47 (C) TELEX: TWX 710-581-4766
 50 (2) INFORMATION FOR SEQ ID NO: 1
 52 (i) SEQUENCE CHARACTERISTICS:
 53 (A) LENGTH: 866 amino acids
 54 (B) TYPE: amino acid
 55 (C) STRANDEDNESS: single
 56 (D) TOPOLOGY: linear
 W--> 58 (ii) MOLECULE TYPE:
 59 (A) DESCRIPTION: peptide

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/753,008

DATE: 02/11/2002
TIME: 09:36:38

Input Set : N:\Crf3\RULE60\09753008.txt
Output Set: N:\CRF3\02112002\I753008.raw

```

61 (iii) HYPOTHETICAL: NO
63 (v) FRAGMENT TYPE: internal fragment
65 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1
67 Met Val Asn Ser Ser Arg Val Gln Pro Gln
68 1 5 10
70 Gln Pro Gly Asp Ala Lys Arg Pro Pro Ala
71 15 20
73 Pro Arg Ala Pro Asp Pro Gly Arg Leu Met
74 25 30
76 Ala Gly Cys Ala Ala Val Gly Ala Ser Leu
77 35 40
79 Ala Ala Pro Gly Gly Leu Cys Glu Gln Arg
80 45 50
82 Gly Leu Glu Ile Glu Met Gln Arg Ile Arg
83 55 60
85 Gln Ala Ala Ala Arg Asp Pro Pro Ala Gly
86 65 70
88 Ala Ala Ala Ser Pro Ser Pro Pro Leu Ser
89 75 80
91 Ser Cys Ser Arg Gln Ala Trp Ser Arg Asp
92 85 90
94 Asn Pro Gly Glu Glu Ala Glu Glu Glu
95 95 100
97 Glu Glu Glu Val Glu Gly Glu Glu Gly
98 105 110
100 Met Val Val Glu Met Asp Val Glu Trp Arg
101 115 120
104 Pro Gly Ser Arg Arg Ser Ala Ala Ser Ser
105 125 130
107 Ala Val Ser Ser Val Gly Ala Arg Ser Arg
108 135 140
110 Gly Leu Gly Gly Tyr His Gly Ala Gly His
111 145 150
113 Pro Ser Gly Arg Arg Arg Arg Glu Asp
114 155 160
116 Gln Gly Pro Pro Cys Pro Ser Pro Val Gly
117 165 170
119 Gly Gly Asp Pro Leu His Arg His Leu Pro
120 175 180
122 Leu Glu Gly Gln Pro Pro Arg Val Ala Trp
123 185 190
125 Ala Glu Arg Leu Val Arg Gly Leu Arg Gly
126 195 200
128 Leu Trp Gly Thr Arg Leu Met Glu Glu Ser
129 205 210
131 Ser Thr Asn Arg Glu Lys Tyr Leu Lys Ser
132 215 220
134 Val Leu Arg Glu Leu Val Thr Tyr Leu Leu
135 225 230

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/753,008

DATE: 02/11/2002
TIME: 09:36:38

Input Set : N:\Crf3\RULE60\09753008.txt
Output Set: N:\CRF3\02112002\I753008.raw

137	Phe Leu Ile Val Leu Cys Ile Leu Thr Tyr
138	235 240
140	Gly Thr Glu Ala Asp Asn Arg Ser Phe Ile
141	245 250
143	Phe Tyr Glu Asn Leu Leu Leu Gly Val Pro
144	255 260
146	Arg Ile Arg Gln Leu Arg Val Arg Asn Gly
147	265 270
149	Ser Cys Ser Ile Pro Gln Asp Leu Arg Asp
150	275 280
152	Glu Ile Lys Glu Cys Tyr Asp Val Tyr Glu
153	285 290
155	Thr Ala Ala Gln Val Ala Ser Leu Lys Lys
156	295 300
158	Asn Val Trp Leu Asp Arg Gly Thr Arg Ala
159	305 310
161	Thr Phe Ile Asp Phe Ser Val Tyr Asn Ala
162	315 320
164	Asn Ile Asn Leu Phe Cys Val Val Arg Leu
165	325 330
167	Leu Val Glu Phe Pro Ala Thr Gly Gly Val
168	335 340
170	Ile Pro Ser Trp Gln Phe Gln Pro Leu Lys
171	345 350
173	Leu Ile Arg Tyr Val Thr Thr Phe Asp Phe
174	355 360
176	Phe Leu Ala Ala Cys Glu Ile Ile Phe Cys
177	365 370
179	Phe Phe Ile Phe Tyr Tyr Val Val Glu Glu
180	375 380
W--> 182	Ile Leu Glu Xaa Ile Arg Ile His Lys Leu
183	385 390
W--> 185	His Tyr Phe Arg Xaa Ser Phe Trp Asn Cys
186	395 400
188	Leu Asp Val Val Ile Val Val Leu Ser Val
189	405 410
191	Val Ala Ile Gly Ile Asn Ile Tyr Arg Thr
192	415 420
W--> 194	Ser Asn Val Glu Val Xaa Leu Leu Gln Phe
195	425 430
W--> 197	Leu Xaa Glu Asp Gln Asn Thr Phe Pro Asn
198	435 440
200	Phe Glu His Leu Ala Tyr Trp Gln Ile Gln
201	445 450
203	Phe Asn Asn Ile Ala Ala Val Thr Val Phe
204	455 460
206	Phe Val Trp Ile Lys Leu Phe Lys Phe Ile
207	465 470
209	Asn Phe Asn Arg Thr Met Ser Gln Leu Ser

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/753,008

DATE: 02/11/2002
TIME: 09:36:38

Input Set : N:\Crf3\RULE60\09753008.txt
Output Set: N:\CRF3\02112002\I753008.raw

210		475	480
212	Thr Thr Met Ser Arg Cys Ala Lys Asp Leu		
213		485	490
215	Phe Gly Phe Ala Ile Met Phe Phe Ile Ile		
216		495	500
218	Phe Leu Ala Tyr Ala Gln Leu Ala Tyr Leu		
219		505	510
221	Val Phe Gly Thr Gln Val Asp Asp Phe Ser		
222		515	520
224	Thr Phe Gln Glu Cys Ile Phe Thr Gln Phe		
225		525	530
227	Arg Ile Ile Leu Gly Asp Ile Asn Phe Ala		
228		535	540
W--> 230	Glu Ile Glu Glu Ala Asn Xaa Arg Val Leu		
231		545	550
233	Gly Pro Ile Tyr Phe Thr Thr Phe Val Phe		
234		555	560
236	Phe Met Phe Phe Ile Leu Leu Asn Met Phe		
237		565	570
239	Leu Ala Ile Ile Asn Asp Thr Tyr Ser Glu		
240		575	580
W--> 242	Val Lys Ser Asp Leu Xaa Xaa Xaa Ala Gln		
243		585	590
245	Gln Lys Ala Glu Met Glu Leu Ser Asp Leu		
246		595	600
248	Ile Arg Lys Gly Tyr His Lys Ala Leu Val		
249		605	610
251	Lys Leu Lys Leu Lys Lys Asn Thr Val Asp		
252		615	620
254	Asp Ile Ser Glu Ser Leu Arg Gln Gly Gly		
255		625	630
257	Gly Lys Leu Asn Phe Asp Glu Leu Arg Gln		
258		635	640
260	Asp Leu Lys Gly Lys Gly His Thr Asp Ala		
261		645	650
263	Glu Ile Glu Ala Ile Phe Thr Lys Tyr Asp		
264		655	660
266	Gln Asp Gly Asp Gln Glu Leu Thr Glu His		
267		665	670
269	Glu His Gln Gln Met Arg Asp Asp Leu Glu		
270		675	680
272	Lys Glu Arg Glu Asp Leu Asp Leu Asp His		
273		685	690
275	Ser Ser Leu Pro Arg Pro Met Ser Ser Arg		
276		695	700
278	Ser Phe Pro Arg Ser Leu Asp Asp Ser Glu		
279		705	710
281	Glu Asp Asp Asp Glu Asp Ser Gly His Ser		
282		715	720

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/753,008

DATE: 02/11/2002
TIME: 09:36:38

Input Set : N:\Crf3\RULE60\09753008.txt
Output Set: N:\CRF3\02112002\I753008.raw

284 Ser Arg Arg Arg Gly Ser Ile Ser Ser Gly
285 725 730
287 Val Ser Tyr Glu Glu Phe Gln Val Leu Val
288 735 740
290 Arg Arg Val Asp Arg Met Glu His Ser Ile
291 745 750
293 Gly Ser Ile Val Ser Lys Ile Asp Ala Val
294 755 760
296 Ile Val Lys Leu Glu Ile Met Glu Arg Ala
297 765 770
299 Lys Leu Lys Arg Arg Glu Val Leu Gly Arg
300 775 780
302 Leu Leu Asp Gly Val Ala Glu Asp Glu Arg
303 785 790
305 Leu Gly Arg Asp Ser Glu Ile His Arg Glu
306 795 800
308 Gln Met Glu Arg Leu Val Arg Glu Glu Leu
309 805 810
311 Glu Arg Trp Glu Ser Asp Asp Ala Ala Ser
312 815 820
314 Gln Ile Ser His Gly Leu Gly Thr Pro Val
315 825 830
317 Gly Leu Asn Gly Gln Pro Arg Pro Arg Ser
318 835 840
W--> 320 Ser Arg Pro Ser Ser Ser Gln Ser Xaa Thr
321 845 850
323 Glu Gly Met Glu Gly Ala Gly Gly Asn Gly
324 855 860
326 Ser Ser Asn Val His Val
327 865

C--> 330 (2) INFORMATION FOR SEQ ID NO: 2
332 (i) SEQUENCE CHARACTERISTICS:
333 (A) LENGTH: 523 amino acids
334 (B) TYPE: amino acid
335 (C) STRANDEDNESS: single
336 (D) TOPOLOGY: linear

W--> 338 (ii) MOLECULE TYPE:
339 (A) DESCRIPTION: peptide
341 (iii) HYPOTHETICAL: NO
343 (v) FRAGMENT TYPE: internal fragment
345 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2
348 Phe Leu Ala Lys Glu Glu Ala Arg Lys Val
349 1 5 10
351 Lys Arg Leu His Gly Met Leu Arg Ser Leu
352 15 20
354 Leu Val Tyr Met Leu Phe Leu Leu Val Thr
355 25 30
357 Leu Leu Ala Ser Tyr Gly Asp Ala Ser Cys
358 35 40

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/753,008

DATE: 02/11/2002
TIME: 09:36:39

Input Set : N:\Crf3\RULE60\09753008.txt
Output Set: N:\CRF3\02112002\I753008.raw

L:3 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:5 M:220 C: Keyword misspelled or invalid format, [(i) APPLICANT:]
L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:58 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:330 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:338 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:436 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:448 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:508 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:516 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:544 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:647 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:655 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:686 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:689 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:713 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:728 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:731 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:734 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:737 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:740 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:776 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:784 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:801 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/753,008

DATE: 02/11/2002

TIME: 09:36:39

Input Set : N:\Crf3\RULE60\09753008.txt
Output Set: N:\CRF3\02112002\I753008.raw

L:809 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:921 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:929 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:1121 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1129 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:1141 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1149 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:1161 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1169 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:1182 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1190 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:1201 M:220 C: Keyword misspelled or invalid format, [(2) INFORMATION FOR SEQ ID NO:]
L:1209 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12